

DETAILED ACTION

The IDS received 9/6/2005, the preliminary amendment received 5/12/2005 have been entered.

Claims 17-31 are presented for examination on the merits.

Claim Objections

Claims 30-31 are objected to because of the following informalities: the word "to" is missing after "according" on line 1 in each occurrence. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 17-21, 27-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Nothwehr et al. (1989).

Nothwehr et al. teach a (screening) method for determining the significance of a plurality of variants (read as wild type and at least one mutant variants) of at least one gene comprising: (a) obtaining a sample of at least one protein variant (read as mutant AIV Δ14, see page 4645, Fig. 4) encoded by the plurality of variants of said at least one gene; (b) exposing the protein encoded by said nucleic acid molecule to a plurality of proteases (page 4645, Fig. 4, legend); (c) determining an extent of proteolytic cleavage of said protein (page 4645, Fig. 4); and, optionally, (d) comparing said extent of proteolytic cleavage of the protein encoded by said nucleic acid molecule with an extent of proteolytic cleavage of a wild-type protein when exposed to said plurality of proteases (page 4645, Fig. 4); wherein said at least one protein variant is exposed to a plurality of protease (trypsin and chymotrypsin, page 4645, Fig. 4 legend) that attach different sites within the at least one protein variant; wherein said extend of proteolytic cleavage is determined using a conventional protein SDS-PAGE analysis with blotting (page

4645, Fig. 4); wherein additional studies are undertaken to determine the functionality of the at least one protein variant (page 4646, left column, 1st full paragraph, also see abstract).

Claims 18, 22-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Kardos et al. (1999).

Kardos et al. teach a (screening) method for determining the significance of a plurality of variants (read as wild type and mutants, see abstract, lines 6-7) comprising: (a) obtaining a sample of at least one protein variant (read as variants of mutants, page 12252, left column, 1st full paragraph, lines 25-31) encoded by the plurality of variants of said at least one gene; (b) exposing the protein to at least one proteases: pepsin (page 12250, right column, 6th full paragraph); (c) determining an extent of proteolytic cleavage of said protein (page 12251, left column, lines 1-4); and, optionally, (d) comparing said extent of proteolytic cleavage of the protein with an extent of proteolytic cleavage of a wild-type protein when exposed to proteases (page 12254, left column, 2nd full paragraph, and Fig. 7); wherein said extent of proteolytic cleavage is determined using a conventional protein SDS-PAGE analysis with blotting (page 12251, left column, lines 1-4); wherein additional studies are undertaken to determine the functionality of the at least one protein variant (page 12254, left column, 2nd full paragraph, and also DISCUSSION on page 12254).

Claims 17-31 are rejected under 35 U.S.C. 102(b) as being anticipated by Chiang et al. (2001).

Chiang et al. teach a (screening) method for determining the significance of a plurality of variants (read as wild type GFP and its mutant variants, see Abstract) of at least one gene comprising: (a) obtaining a sample of at least one protein variant or plurality of protein variants (page 230, left column, 2nd and 3rd full paragraph) encoded by the plurality of variants of said at least one gene; (b) exposing the protein encoded by said nucleic acid molecule to a plurality of proteases (page 230, right column, 3rd full paragraph, and also page 232, Fig. 2 and page 233, Table II); (c) determining an extent of proteolytic cleavage of said protein (page 232, Fig. 2 and page 233, Table II); and, optionally, (d) comparing said extent of proteolytic cleavage of the protein encoded by said nucleic acid molecule with an extent of proteolytic cleavage of a wild-

type protein when exposed to said plurality of proteases (page 232, Fig. 2 and page 233, Table II); wherein said at least one protein variant is exposed to a plurality of protease (trypsin/pronase/proteinase K, page 232, left column, lines 2-3, also see page 232, Fig. 2 and page 233, Table II) that attach different sites within the at least one protein variant; wherein said extend of proteolytic cleavage is determined using a conventional protein SDS-PAGE analysis with blotting (page 230, right column, 3rd full paragraph, also see page 232, Fig. 2); wherein additional studies (read as fluorescence measurement, see page 232, end of right column) are undertaken to determine the functionality of the at least one protein variant (page 233, Fig. 3).

Therefore, the cited reference is deemed to anticipate the instant claims above.

Conclusion

No claim is allowed.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Jon Weber can be reached at (571) 272-0925.

B Shen

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/JON P WEBER/

Supervisory Patent Examiner, Art Unit 1657